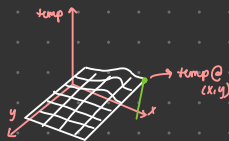
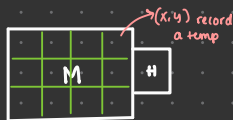


SEPT. 8TH



able to find a function

$$f(x, y, t) \rightarrow \text{temp}$$

found by testing known information, and explain

hindsight or predict future.

but not helpful

NOK: OUR MODEL

can be falsified
(~ like new evidence)

helps unify +
differentiated
theories.

NEEDS TO BE FALSIFIABLE TO BE KNOWLEDGE.

Suppose we have triples of ints. governed by the rule. if we ask enough questions, we might be able to predict triples that will follow the rule.

↳ we make calculated requests.

* note: a set of examples doesn't always represent the rule

* note: there are infinite rules for finite examples.

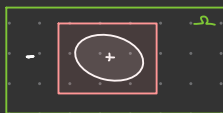
↳ we prefer simpler models.

POSITIVE EXAMPLES:

expect pos. result under hypothesis

NEGATIVE EXAMPLES:

expect neg. result under hypothesis

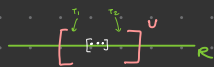


Ω = set of all possible examples

THIS KIND OF VENN DIAGRAM SHOWS THE
BENEFIT OF NEG. EXAMPLES.

confirmation bias: unwilling to try
neg. examples.

COMPUTATIONAL LEARNING THEORY. (math framework around learning) \Rightarrow HOW MANY EXAMPLES DO WE NEED TO PREDICT.



find unknown interval U .

\rightarrow use tightest fit on pos. examples \leftarrow a learning strategy.

IN THIS KIND OF PROBLEM WE MUST DEFINE REASONABLY CLOSE \Rightarrow maybe U' has error rate at most ϵ w/ probability p .

$$\Pr(X \in T_1 \cup X \in T_2) < \epsilon$$